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ABSTRACT

The concept of student-institution fit in higher education is clarified, and an approach that can be applied to different types of campuses is described. Also considered is the theoretical framework, including the concept of "person-environment interaction." Three sets of factors are important: student characteristics, institutional characteristics, and the effects of the interaction between the student and the institution. Student characteristics include personal attributes, needs, abilities, interests, and values, while institutional characteristics include physical, academic, social, and psychological attributes that affect the campus environment. To increase levels of fit between campus and student, enrollment managers need to define the campus environment and gather data as the basis for making changes when student-institution mismatches occur. An intervention model is described that allows the college to set goals based on intended outcomes for students, design programs and activities to help fulfill the goals, and measure how well the goals are being met. The model involves seven steps: valuing, goal setting, programming, fitting, mapping, observing, and recycling. Appended is a list of environmental assessment approaches, including the names of developers of the approaches. (SW)

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STUDENT-INSTITUTION FIT

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Paper presented at the "Leadership for Enrollment Management" Conference sponsored by The College Board and Loyola University of Chicago, Chicago, July 12, 1985

Student-Institution Fit

Collectively, the presenters at this national conference have told us that enrollment management in higher education requires a systematic managing of student enrollments not only from the point when a prospective student makes initial contact with the institution but continuously throughout the student's collegiate career to graduation and even beyond as the institution develops alumni support for its enrollment management effort. We have seen that enrollment management is indeed a complex and comprehensive process that involves the entire institution in a variety of activities. In part, these activities include developing marketing and recruitment strategies; determining the relationship between tuition levels and financial aid; and evaluating the effectiveness of the institution's academic advising, orientation, and other student affairs programs as each supports the institution's overall student retention effort. Certainly, it comes as no surprise today that much attention is being placed on student retention efforts at institutions of higher education of all types across this nation. The large number of studies alone that have been published in recent years attest to the significant energies and attention being focused on student retention on the college and university campus. The Carnegie Council in 1980 in its Three Thousand Futures report predicted that colleges would exert an all-out effort to increase student retention rates. The Council estimated that these retention efforts would be successful and would likely add a 20% gain-in-time spent in college by those students who in the past have not persisted to graduation (pp. 43-44).

The importance of retaining matriculated students takes on special meaning in an era not only when the numbers of high school students continue to

decline, but also when average graduation rates after even five years in an institution range from only 53% at four-year public institutions to 63% at four-year, private independent institutions (Beal and Noel, 1980). Other studies also reveal a wide range of alarming attrition statistics depending, of course, on how one defines the terms dropout, stopout, and persister. No matter what definition is used, however, what each study plainly reveals is that colleges and universities are indeed losing large numbers of students after they have been successfully attracted to and matriculated in the institutions. Thus, those on the campus concerned with developing a comprehensive and effective enrollment management plan must also carefully examine the reasons underlying student withdrawal from the institution. Why is it that after students are attracted to the institution, often times at great expense, that they become dissatisfied with the campus and choose to leave?

In one study, half of college dropouts surveyed reported being dissatisfied generally with the college environment and the rest felt that the institution was not helping them with both future career plans and personal development (Panos and Astin, 1967). Those that left clearly registered discomfort of some type and reported "feelings of being in the wrong place" (Painter and Painter, 1982, p. 87).

Additional factors resulting in a mismatch between students and their institution include reasons often times cited by students themselves (Painter and Painter, 1982). Some of these for example, include (1) lack of fit between students' prior expectations regarding campus life in general and what they, in fact, experience at the institution; (2) few opportunities to develop warm friendships, especially with peers of similar background; (3) lack of fit between student ability and academic standards of the college that leads to student-reported low grades, professorial contempt, and course content that is hard to understand; and finally, (4) the unavailability of specific career-

related courses, adequate recreational facilities, and student support services in general (pp. 88-92). In order to better appreciate the many complex issues related to student attrition, one needs to understand an important concept directly linked to student retention. The concept, known as "student-institution fit", may not be viewed by some as new since many admissions officers in higher education for years have been trying to fit, or match, student characteristics to institutional characteristics, hoping that a good match will result in satisfied and productive graduates for the institution. What is new, however, is a need to systematically approach this critical matching of student and institution using a carefully conceived and theoretically-sound process that will enable enrollment managers to take positive action to significantly increase the fit between students and institutions.

Before I clarify the concept of fit, I want you to know that I do not subscribe to the notion that there exists only one or two ideal institutions of higher education that fit perfectly with one student's needs, abilities, and expectations. On the contrary, I believe many institutions can indeed provide the kind of challenges and support for a wide variety of students that would result in a mutually satisfying relationship for both the student and institution.

In the past in order to attract new students who seemed to match well with the institution, much attention has been focused on identifying demographic characteristics of students who persist to graduation. These characteristics often times include high school grade point average and national test scores and to a lesser extent, parents' income, occupation, and location of residence. These characteristics of graduates are assumed to be a significant part of the formula for successful student retention on the campus. However, matching students with institution has been an incomplete process and has contributed to the notion that for any given institution there exists a small, select group of students

who will match best with the institution. Or, viewed another way, this perspective implies that for the student, there may be only one or two academic institutions that would provide the best learning conditions.

Although this approach has served higher education well for many years, especially in those years when applicant pools were more than adequate, to continue this approach to student-institution fit will not serve us well neither in our current era nor in the years ahead. A much broader approach to understanding the nature of student-institution fit is now needed. This new approach would necessarily include not only the traditional focus on student and institutional characteristics but also the effects of the interaction of student with the campus environment. Understanding how students interact with the institution and how this interaction is directly linked to student retention and thus enrollment management is an often overlooked element of student-institution fit.

My presentation today has two major objectives: (1) to clarify the concept of student-institution fit in higher education, and (2) to describe a systematic approach that can be applied to the campus, regardless of institutional control, size, location, or type, that will enable you to optimize levels of fit which in turn will assist your efforts to produce satisfied and productive gradutes for the institution.

Clarifying Student-Institution Fit

Enrollment managers desiring to define for their own institutions the nature of student-institution fit must carefully consider three important sets of factors: first, student characteristics; secondly, institutional characteristics; and third, the effects of the interaction between the student and institution. Student characteristics include personal attributes, needs, abilities, expectations, interests, and values that students bring with

them to the campus. Institutional characteristics include a complex array of physical, academic, social and even psychological attributes that make up the campus environment. Finally, the physical, cognitive, and affective interactions between students and their college or university also constitute an important relationship that can lead to varying degrees of student satisfaction, academic achievement, and persistence in the institution. When students' needs, goals, interests, and expectations are adequately met by various campus conditions, then, from the student's perspective, a certain degree of fit or congruency is believed to exist. Likewise, when student academic and social abilities mesh well with institutional requirements, then fit or match between student and institution is also assumed to exist.

A growing body of knowledge that is both research- and theory-based strongly suggests that the degree of congruency, or fit, between a variety of student characteristics and the ability of the institution to adequately respond to those characteristics could lead to increased student satisfaction, academic achievement, and even personal growth (Walsh 1978; Huebner 1980; Lenning, Sauer, and Beal 1980). Creager (1968) discusses fit by stating that the principal objective of matching students with colleges is to maximize educational objectives related to student persistence in college, motivation for graduate school, realistic career choice, high academic performance, and even mental health (p. 312). Painter and Painter (1982) believe that "the right choice will match the student with the college that fits personal abilities and personality, with understandable consequences of feelings of gratification. The wrong choice will cause frustration and angry blame-fixing by the student and college" (p. 86). Finally, Pace (1980) describes findings that are especially helpful to an understanding of student-institution fit: (1) students entering college with highly unrealistic expectations about the environment are more likely to have problems adjusting and are more likely to

withdraw than are students who enter with realistic goals and expectations, (2) students who perceive their campus environment to be friendly, congenial, and supportive are more likely to be satisfied with the college, (3) student interaction with the scholastic press of the institution is directly related to goals for graduate study, and (4) when congruency, or fit, exists between student personality characteristics and institutional characteristics, student objectives are more likely to be achieved (pp. 91-92).

Person-Environment Interaction: A Conceptual Framework

In order for enrollment managers to be fully cognizant of both student and campus factors influencing fit, they must also be familiar with the theoretical framwork upon which the concept of fit is established. This framework consists of a family of theory-based models that should be an integral part of the professional preparation of those seeking to serve a leadership role in enrollment planning in higher education.

Student-institution fit is directly related to a broad theoretical concept known as person-environment interaction. Even though the application of this concept to higher education has recently been the focus of much attention in the professional literature, the concept itself is not new. Theorists and researchers, especially from psychology and sociology dating back to 1924, have explored the relationships between individuals and their environments. Kantor (1924), Lewin (1936) and Murray (1938) each were early contributors to the theoretical foundation for interactionism. The importance in understanding factors contributing to person-environment interaction in higher education becomes clearer if one assumes that all aspects of human behavior--what we know, feel and do--cannot occur in a vacuum. Not only do people bring their own physical, social and psychological characteristics into the environment, but the environment in which they live will necessarily have

impact and influence on their behavior. Thus, the interactionist perspective would suggest that both the individual and the environment shape each other. It is this perspective that serves as the link between enrollment managers and their understanding of student-institution fit.

Several excellent reviews are available of theory-based models of person-environment interaction which hold particular value for enrollment management (Walsh 1973, 1975, 1978; Huebner 1980; Williams 1984). My purpose today is not to thoroughly review these models for you as that certainly is neither feasible nor desired. However, I will briefly introduce you to one example of a conceptual framework that is available to assist enrollment managers in understanding the interactionist relationship between student and campus.

The Person-Environment Transactional Approach. Pervin (1968) proposes that behavior results from interactions between the person and the environment. He believes environments exist for each person that tend to match the individual's perception of his or her self. Thus, when individuals are in environments congruent with their self-perceived personality characteristics, higher performance, greater satisfaction, and reduced discomfort and stress will occur. Pervin bases his approach on certain key assumptions: first, that individuals find major discrepancies between their perceived actual and ideal selves to be unpleasant and painful; and second, that people are positively attracted to environments that can move them toward their ideal selves. Conversely, individuals are negatively disposed toward environmental factors that move them away from their ideal selves (Walsh, 1978, p. 12).

Pervin's approach would suggest that institutions should encourage prospective and especially current students to consider how they view both their actual and ideal selves on a number of different dimensions (ie, socially, physically, intellectually, etc.) as well as their perceptions and expectations

of the campus environment. An important task for enrollment managers would be to convey to these students and their parents the potential of the campus environment for facilitating movement, such as person growth, towards their ideal selves. However, the environmental assessment undertaken may reveal that the campus does not hold that potential for many students. If that happens, institutional leaders would need to determine in what ways to best modify the environment in order to faciliate student development.

The Pervin model just described is only one of several currently available for understanding how students interact with their campus. All the theoretical approaches stress to varying degrees that human behavior is a function of the characteristics of the person in interaction with the environment. They serve to provide a conceptual foundation for understanding the relationship between institutions and students.

Optimizing Student-Institution Fit

In order to optimize fit enrollment managers need to carefully assess where mismatches are occurring between institution and student. These mismatches are usually manifested through academic, social, and personal adjustment problems that students experience on the campus. Unfortunately, students with adjustment or other types of problems have been viewed as being deficient in some manner (Banning and McKinley 1980). This perspective has evolved from a traditional institutional reliance on a counseling or medical model that views students as clients or patients. This approach has, until recently, turned attention away from both the campus environment and the interactive relationship between students and their campus. When students are viewed as clients, campus environments are rarely seen as deficient or in need of intervention (p. 40). If institutions always assume that dissatisfied students are deficient in some way, institutional efforts may at times

be aimed at helping the student adjust or accommodate to a deficient campus environment (Banning and Kaiser 1974). I am not saying that every problem that students experience is directly a result of a flawed campus environment. However, with careful assessment many student problems can be linked to their campus environments; but unless a significant segment of the student body experiences the problem, then one should not hastily decide to intervene in the campus.

For example, how will an institution know if its brightest, entering students expect to have a significant amount of out-of-classroom contact with faculty and then experience disappointment because the expectation is not realized? Or, how will campus leaders know that over half of their entering students expect to be socially active within the fraternity and sorority system and soon discover after arrival on campus that only one student in four is traditionally pledged? What these examples illustrate is that students may enter the campus with unrealistic expectations about campus life. In these examples enrollment managers have several possible courses of action: first, they could assume that unfulfilled expectations are a normal part of campus life and thus they could do nothing; second, they could communicate to students more clearly prior to enrollment or during new student orientation what they can realistically expect in terms of faculty contact and Greek life; or, after deciding that the students' expectations are legitimate, they could intervene in the environment to try to turn these expectations into reality. If the institution chooses either the second or the third course of action, then it would be affirmatively acting to increase its fit with students. The first option merely maintains the status quo, the mismatch between student and campus.

Enrollment managers wanting to increase levels of fit between campus and student need to perform two related sets of tasks: (1) the total campus

environment must be carefully and systematically defined and then assessed; and (2) the data gathered must be used as the basis for redesigning the campus environment in those cases where student-institution mismatches occur.

In undertaking the first set of tasks, one can turn to the professional literature for guidance. There is no need to reinvent the wheel when desiring to conceptualize the campus environment. In fact, in recent years many researchers have proposed a variety of ways to both conceptualize and define campus environments (Banning and McKinley 1980; Moos 1974; Astin 1968; Blocher 1974, 1978). Even though each approach is unique, each in some way addresses four broad elements that comprise the campus environment: the physical, social/cultural, academic/intellectual, and the psychological domain. Each domain has characteristics which influence fit between student and institution. Once enrollment managers determine what ways to best define their own campus environment, they next need to devise a plan for its systematic assessment. These include demographic, perceptual, behavioral, and multimethod approaches. More specific information about these assessment tools can be found in Huebner's (1980) work. Examples of each of the four major types of assessment are found in Appendix A.

Environmental Intervention

Defining and assessing the campus environment enable enrollment managers to proceed to the most important step in optimizing student-campus fit, that of intervention. Since 1975, a few intervention models have been developed that view the student, the campus, and student-institution interaction as integral parts of an intervention process. The development of one of these, the Ecosystem Model, has particular value to enrollment managers. The model was based on certain assumptions about students and campus environments (Kaiser 1978, p. 26): (1) that campus environments include all physical, chemical, biological

and social stimuli that impinge upon students; (2) that students shape their environment and at the same time are shaped by it; (3) that campus environments facilitate and inhibit a wide spectrum of student behavior; and (4) that successful environmental design is dependent upon full participation of all campus constituencies.

The model outlines a process that allows the institution to: (1) set its goals based upon intended outcomes for students; (2) design programs and activities that will assist in fulfilling those goals (the intervention); and (3) measure how effectively the goals are being met. The process includes seven basic steps: Valuing, Goal Setting, Programming, Fitting, Mapping, Observing, and Recycling. I will briefly describe each step by utilizing an example about faculty-student contact, a variable researchers have linked closely to student persistence.

1. Valuing. A wide variety of values considered desirable for the campus is selected through consensus exercises (ie., values clarification). All campus constituencies need to be involved. For example, after a values clarification exercise the following three value statements concerning students are identified: (1) Development of skills which enhance career decision-making in students is valued, (2) Development of leadership skills among freshmen is valued, and (3) Involvement between faculty and freshmen outside the classroom is valued.

2. Goal Setting. The list of institutional values is next prioritized and one or more is selected for translation into measurable, programmatic goal statements. Using the three values identified above, the value statement about faculty-student relations is selected as the top priority. Thus, the following goal statement might be agreed upon: "The institution will systematically provide a variety of opportunities for freshmen to have meaningful involvement with faculty outside the classroom during the next

academic year."

3. Programming. The general goal statement is next translated into observable and tangible student programs and activities. For example, programs to address the above goal would be developed as follows: a) one or more freshmen will be appointed/elected to campus committees with faculty and student representation, b) a systematic program of faculty involvement with students in the residence halls will be developed, c) a plan will be developed to encourage several faculty to invite small groups of freshmen into their homes for dinner and topical discussion, d) student clubs and organizations will be strongly encouraged to invite faculty participation as advisers and in special events, e) the institution will develop plans for rewarding faculty involvement with students outside the classroom, and f) significant faculty involvement in new student orientation will be facilitated.

4. Fitting. Programs and activities identified above are fitted to meet the needs and expectations of students. These needs may require special programs at the macrolevel (campus wide), the microlevel (selected groups), or life-space level (for the individual). For example, a macrolevel program would include faculty involvement in orientation for all freshmen. A microlevel program would consist of faculty involvement with small groups of freshmen in faculty homes. Finally, where needed, a life-space program would include the appointment of individual freshmen to campus committees.

5. Mapping. Student perceptions of the campus environment are measured (using a variety of instruments) and compared with goal statements established in Step 2. A special focus is placed on student-reported stimuli in the environment that evoke the measured perceptions. For example, do freshmen at the end of the fall term perceive that several opportunities exist for genuine interaction with faculty outside the classroom? Did freshmen expect to have a significant level of contact with faculty prior to

matriculation? Do freshmen now perceive any institutional commitment to provide these opportunities? Do the students report satisfying experiences with faculty?

6. Observing. Student behavior is observed, measured, and compared with perceptions identified in Step 5. For example, how many freshmen actually have contact outside the classroom with faculty? In what specific settings are freshmen meeting with faculty? What are the demographic characteristics of those freshmen who meet frequently with faculty? Who are least satisfied and most satisfied?

At this stage in the process, if the ecosystem design is working, high correspondence between behavior (Step 6), perceptions (Step 5), and goals (Step 2) should exist.

7. Recycling. The final step consists of a recycling of all data collected in Steps 1 to 6 back to Step 1 for further review and perhaps clarification of institutional values previously identified. At this point the ecosystem design process begins again.

This comprehensive and systematic process for assessing and intervening in the campus environment provides a unique interactionist perspective which takes into account the student, the environment, and their interaction. Regardless of which organizational model for enrollment management is used on a campus, this ecosystem model can be put to effective use. The comprehensiveness of the model mandates that all campus constituencies be integrally involved. Thus, like the concept of enrollment management itself, this model requires full support from the highest levels of the institution (Kaiser 1978).

Conclusion

The concept of student-institution fit includes much more than institutional searches for prospective students with predetermined characteristics

that are based on the characteristics of graduates. Instead, what is needed is a broad interactionist perspective regarding matching students and institutions. The complex nature of student-institution fit must also be carefully linked to an institution wide student retention plan. This plan must identify not only where student-environment mismatches are occurring buy why they are occurring.

Many times students who are carefully recruited to the campus have unrealistic expectations of what they will experience while on the campus or believe that they do not have the abilities needed to cope effectively with the campus environment. A good plan would respond to this problem in two ways. First, there is much that can be communicated to prospective students and their parents that will temper their unrealistic expectations with reality. It is vital that the image projected by the institution to its external constituencies be an accurate one.

Secondly, a good plan also responds to the mismatches already existing on the campus. Again, one should not assume that student dissatisfaction resulting from adjustment or other types of problems always represents student deficiencies of some sort. Instead, enrollment managers should look critically at the campus environment to ascertain what negative impact it may be having on these students. A careful assessment of the campus environment will lead to more informed decisions regarding ways to intervene in the campus such that the mismatches between students and campus can be effectively reduced. The campus enrollment management team must take seriously this broad perspective for understanding student-institution fit. It must be willing to use the theory base and environmental assessment tools in designing a comprehensive plan of action that will succeed in increasing levels of fit between campus and student.

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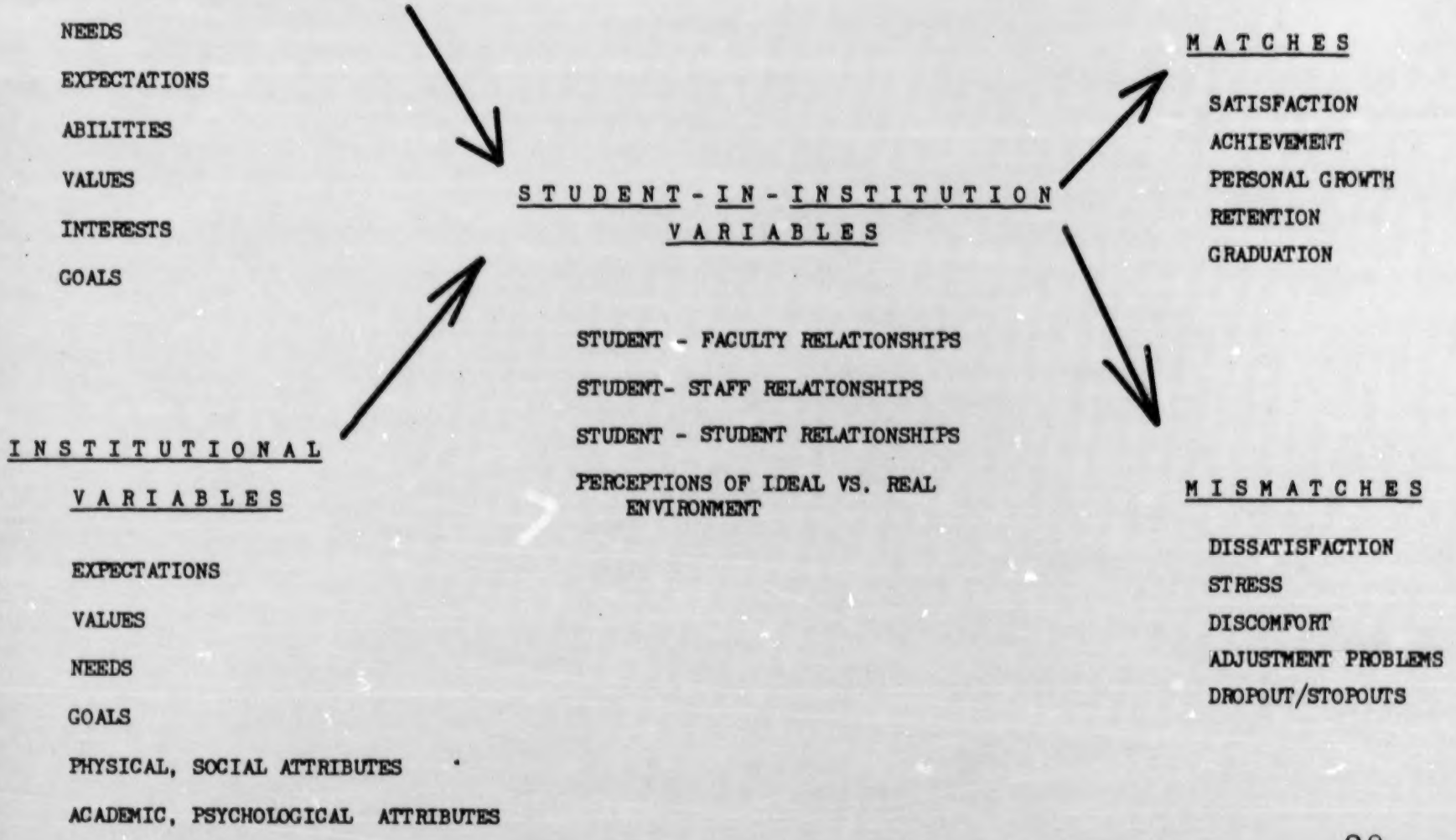
STUDENT - INSTITUTION FIT



APPENDIX A

ENVIRONMENTAL ASSESSMENT

Demographic Approaches

Environmental Assessment Technique (Astin and Holland, 1961)

Self-Directed Search (Holland, 1971)

Perceptual Approaches

Transactional Analysis of Personality and Environment (Pervin, 1967)

Classroom Environment Scale (Moos and Trickett, 1976)

University Residence Environment Scales (Moos and Gerst, 1976)

College Characteristics Index (Pace and Stern, 1958)

Organizational Climate Index (Stern, 1970)

Activities Index (Pace and Stern, 1958)

College and University Environment Scales (Pace, 1969)

Institutional Goals Inventory (ETS, 1972)

Behavioral Approaches

Experience of College Questionnaire (McDowell and Chickering, 1967)

Inventory of College Activities (Astin, 1971)

Multimethod Approaches

College Student Questionnaire (Peterson, 1968)

Questionnaire on Student and College Characteristics (Centra, 1970)